

CHAPTER 1: INTRODUCTION

1.1 BACKGROUND

This environmental impact statement (EIS) is to develop standards for rangeland health and guidelines for grazing administration on public lands managed by the California State Office of the Bureau of Land Management (BLM), exclusive of the California Desert District; and to incorporate those standards and guidelines into existing land use plans. The affected area includes approximately 5.7 million acres of public land in California and northwestern Nevada, of which about 4.4 million acres are grazed. The locations of these public land areas are shown on Map 1.

In 1934, Congress passed the Taylor Grazing Act, directing that the occupancy and use of public rangelands be regulated to preserve the land and its resources from destruction or unnecessary injury, and to provide for the orderly use, improvement, and development of the range. Since passage of the Taylor Grazing Act, several studies and reports to Congress have identified continued problems on the western rangelands. In 1978, Congress enacted the Public Rangelands Improvement Act (PRIA), and included the following findings in their report:

- (a) Rangelands were still producing below their potential;
- (b) Rangelands would remain in unsatisfactory condition or decline even further under the current levels of funding and management; and
- (c) The unsatisfactory condition of public rangelands presented a high risk for soil loss, siltation, desertification, water loss, loss of wildlife and fish habitats, loss of forage for livestock and other grazing animals, degradation of water quality, flood danger, and threats to local economies.

Since passage of PRIA, conditions on most upland areas have improved, but many riparian areas continue to be degraded and are not functioning properly.

In 1991, the Director of the Bureau of Land Management asked the agency's National Public Lands Advisory Council to recommend ways to improve BLM's rangeland management program. The council chartered a blue-ribbon panel of professional ecologists and rangeland managers, who produced a report entitled Rangeland-Program Initiatives and Strategies. In the report, they concluded that BLM's main objectives should be to protect the basic components of rangelands -- soil, water, and vegetation -- and that management goals should be based on modern ecological concepts.

In 1993, the BLM initiated a new effort, now known as "Rangeland Reform 94," to better enhance the environmental health of public rangelands. This initiative was aided by the publication in January 1994 of a report entitled Rangeland Health: New Methods to Classify, Inventory and Monitor Rangelands. The report, published by the Committee on Rangeland Classification, Board of Agriculture, of the National Research Council (whose members are drawn from the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine), contained clearly stated explanations of what rangeland health is, as

well as criteria and indicators of rangeland health. It also discussed current assessment practices, and inventory and monitoring needs.

The "Rangeland Reform 94" initiative, through public involvement and a national EIS, provided the direction for BLM to carry out a rangeland management program that improves ecological conditions, while providing for sustainable development on the land. To support this management direction, in 1995, the Secretary of the Interior developed new grazing regulations to implement needed changes in BLM's rangeland management program.

1.2 PURPOSE AND NEED

As a result of the "Rangeland Reform 94" effort, the Secretary of the Interior issued a final rule for Grazing Administration, on February 22, 1995, that became effective August 21, 1995. Section 4180.2 of this rule required the BLM State Directors to develop state or regional standards and guidelines for grazing administration in consultation with BLM Resource Advisory Councils (RACs), other agencies, and the public. The purpose of the standards and guidelines is indicated by the following quotations from the Federal Register, Vol. 60, No. 35, page 9956, dated February 22, 1995:

The guiding principles for standards and guidelines require that State or regional standards and guidelines address the basic components of healthy rangelands.

The Department intends that the standards and guidelines will result in a balance of sustainable development and multiple use along with progress towards attaining healthy, properly functioning rangelands.

The Department believes that by implementing grazing-related actions that are consistent with the fundamentals of Subpart 4180.1 and the guiding principles of Subpart 4180.2, the long-term health of public rangelands can be ensured.

1.3 FUNDAMENTALS OF RANGELAND HEALTH

The National Research Council, in its report, defines rangeland health as ". . . the degree to which the integrity of the soil and ecological processes of rangeland ecosystems are sustained," referring in particular to those "ecological processes that are most important in sustaining the capacity of rangeland to satisfy values and produce commodities" (Natural Resource Council 1994, pp. 4 and 5). This committee recommended that "the determination of whether a rangeland is healthy, at risk, or unhealthy should be based on the evaluation of three criteria: degree of soil stability and watershed function, integrity of nutrient cycles and energy flow, and presence of functioning recovery mechanisms" (ibid., pp. 97-98). If rangeland health is conserved, then the capacity of the site to produce different mixes of commodities and values is conserved (ibid., pg. 95). A "Rangeland Health Evaluation Matrix," as developed by the National Research Council (ibid., pg 130 & 131) is reproduced in Appendix 1 .

Section 4180.1 of the Grazing Administration Regulations (4180.1, Federal Register Vol. 60, No. 35, pg. 9970) directs that the authorized officer ensure that the following conditions of rangeland health exist:

- (a) Watersheds are in, or are making significant progress toward, properly functioning physical condition, including their upland, wetland, and aquatic components; soil and plant conditions support infiltration, soil moisture storage, and the release of water that are in balance with climate and landform and maintain or improve water quality, water quantity, and the timing and duration of flow.
- (b) Ecological processes, including the hydrologic cycle, nutrient cycle, and energy flow, are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.
- (c) Water quality complies with State water quality standards and achieves, or is making significant progress toward achieving, established BLM management objectives such as meeting wildlife needs.
- (d) Habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal Candidate and other special status species.

Conditions (a) and (b) describe physical and biological characteristics of health rangelands. Conditions (c) and (d) describe healthy rangelands in terms of legal requirements that will be met when rangelands are properly functioning.

1.4 STANDARDS AND GUIDELINES -- BASIC CONCEPTS

"The fundamentals of rangeland health, guiding principles for standards and the fallback standards address ecological components that are affected by all uses of public rangelands, not just livestock grazing. However, the scope of this final rule, and therefore the fundamental of rangeland health of part 4180.1, and the standards and guidelines to be made effective under part 4180.2, are limited to grazing administration" (Federal Register, Vol. 60, No. 35, pg. 9970-9971).

The following are characteristics of standards and guidelines.

A Standard:

- (1) is a criterion regarding a resource quality or quantity upon which a judgement or decision is based (e.g., a statement concerning expected ecosystem or rangeland health);
- (2) is measurable;
- (3) establishes parameters within which resource use and management activities can be conducted; and
- (4) should have observable indicators.

A Guideline:

- (1) describes a practice, method or technique used to ensure that grazing management activities meet standards;
- (2) is either a set of management practices from which one or more practices is selected; or is a specific, required management practice;
- (3) may be adapted or changed when monitoring or other information indicates the guidelines are not effective or a better means of meeting applicable standards exists.

There have been questions about using Desired Plant Communities (DPCs) as standards. DPCs are vegetative communities that are designated through land use plans as the vegetative communities necessary to achieve the goals of the land use plan. A DPC would not be a standard; in order to achieve a DPC, the rangeland would need to be healthy and meeting the standards.

1.5 PROCESS FOR ESTABLISHING STANDARDS AND GUIDELINES

Another result of "Rangeland Reform 94" and the rulemaking by the Secretary of the Interior was the formation of Resource Advisory Councils (RACs) (Federal Register, Vol. 60 No. 35, February 22, 1995). The primary purpose of the RACs is to advise BLM regarding the preparation, amendment and implementation of land use plans. In addition the State Directors are to consult the RACs regarding the development of the standards and guidelines and to identify the geographic area for which the standards and guidelines are developed (43 CFR 4180.2). The rulemaking also directs the State Director to coordinate with Indian tribes, other affected State and Federal land management agencies and the public in the development of standards and guidelines.

By May 1995, the California State Director identified three RACs to be organized in the state and asked for nominations for membership. These RACs were organized on the previous BLM District boundaries in California for the Susanville, Ukiah And Bakersfield Districts. The membership of the RACs are a cross-section of the varying interests in public land management for the area. (The guidelines for the make-up of the membership is prescribed in the rulemaking.) Charters for the RACs, as well as nominations for membership, were submitted to the Secretary of the Interior for approval by July 1995. After formal approval, the State Director announced the formation and initial membership of the RACs on August 22, 1995. (See Chapter 5 for a complete list of RAC members.)

The California Desert Conservation Area (California Desert District) in southern California, has an advisory committee established by section 601 of the Federal Land Policy and Management Act of 1976. Since this advisory council already serves in the same capacity as that identified for the RACs, it was decided to consult with the existing advisory committee in the development of standards and guidelines for southern California, rather than organize an additional group for this purpose.

The location of each RAC area, including the California Desert District Advisory Committee (DAC), as well as the RACs located adjacent to California in Oregon and Nevada are shown on Map 2.

During the spring of 1995, a BLM team was formed for the purpose of assisting the RACs in developing standards and guidelines, and to review existing BLM land use plans for conformity with the new rules.

On September 21, 1995, an initial meeting was held simultaneously with all the RACs, nationally, including a television conference briefing and call by the Secretary of the Interior. This briefing was also given to the California Desert District's DAC. The first major assignment given to the RACs was to provide advice regarding the development of standards and guidelines. Following this briefing, each RAC developed committees for this purpose, and several subsequent meetings and workshops were held by each RAC or RAC subgroup to develop standards and guidelines for the State Director's consideration. These workshops and meetings involved negotiations among the membership of each RAC, and included participation by interested members of the public as well. Each RAC also reviewed draft proposals from the other California RACs and from some of the other states for comparisons and coordination. The RACs all reported that the most challenging issue in this process was to determine the appropriate level of specificity to include in the standards and guidelines.

During this time state-wide workshops were also held with the BLM team, RAC members and representatives, State and Federal agency representatives, and representatives of organizations interested in public land management. The purpose of these workshops was to help the RACs coordinate their efforts, to provide guidance and interpretations of the rulemaking for standards and guidelines, and to determine future strategies for completing the development of state-wide standards and guidelines. Information was also shared about standard and guideline development efforts in adjacent states.

1.6 PUBLIC SCOPING, ISSUES

A Notice of Intent was published in the Federal Register on March 25, 1996 announcing the intent to prepare an environmental impact statement for the development of rangeland standards and guidelines in California and northwestern Nevada. This notice also asked for comments concerning the scope of the EIS and Plan Amendment. Due to concerns by some of the interested public that sufficient notification was not provided, public scoping (comments on issues to be addressed, or comments on the scope of the analysis) was allowed in July, and an additional formal public scoping period was opened for 30 days during August and September 1996.

The new grazing regulations require that the standards and guidelines developed by the State Director must meet the fundamentals for sustaining and enhancing the environmental health of rangelands. Therefore, the decisions within this EIS will only identify standards for healthy rangelands and guidelines which will enable us to meet those standards; and will incorporate those standards and guidelines into existing land use plans.

The following topics were identified at a workshop on June 25, 1996 for possible consideration in the analysis: vegetation communities, special status plants, wildlife, recreation, cultural resources, economics relative to grazing, social values, BLM economic concerns involving

grazing administration, economic affects to local communities, water quality and quantity, watershed and soil relationships, fisheries, and riparian habitat.

During the public scoping periods, the following major issues and concerns were raised:

1. Native plant communities and species, including goals of reintroducing native species in areas dominated by non-natives;
2. Implementation on each allotment, including time frames, yearly scientifically valid monitoring and evaluation, how grazing allotment plans will be developed;
3. Existing laws -- Clean Water Act, Endangered Species Act, Wild Horse and Burro Act, Federal Land Policy and Management Act, etc. -- and the standards within those laws;
4. A "rapid recovery" alternative;
5. Rest rotation, deferred grazing, season of use, suitability, etc. in the alternatives;
6. Protection of riparian areas and fragile desert areas (less than 10" precipitation);
7. The need to make the RAC guidelines more specific, and, conversely, the need to make them less specific (need to allow flexibility for site-specific solutions);
8. The need to have all guidelines based upon documented scientific research, and to show the connection between the guideline and the standard(s) it is designed to achieve (specific examples are stubble height, residual dry matter);
9. The need for state-wide, consistent guidelines, and, conversely, the need for regional guidelines that address regional concerns;
10. Impacts on fuel loads and fire danger;
11. Definition of terms and clarification of intentions, including a request that we not use subjective terms; and,
12. Statements of desired conditions need to indicate the species composition or key indicator species for the various ecosystems.

The complete text of all scoping letters are on file in BLM's California State Office.

1.7 PARAMETERS FOR DEVELOPING AND IMPLEMENTING STANDARDS AND GUIDELINES

The following parameters are being used for analysis purposes and the future implementation of standards and guidelines for rangelands in the planning area:

1. The standards and guidelines selected through this EIS will be incorporated into (and thereby amend) all existing BLM land use plans in the planning area, except as described in Section 1.11 below. Allotment management plans and other activity plans will also be amended as necessary to comply with these standards and guidelines.
2. Standards and guidelines will not replace management plan objectives such as Desired Plant Communities (DPCs). However, management plan objectives will be examined to see that they conform to and support the standards and guidelines, and that they will result in achieving healthy rangelands.
3. It is not within the scope of this EIS to assess the rangeland health or grazing suitability of any specific tract of public rangeland or grazing allotment.

4. The standards and guidelines for managing rangelands for the planning area will apply to the grazing of livestock on all public rangelands in the planning area as the lands are determined available for livestock grazing use. (Again, except as in Section 1.11 below.)
5. It is understood that public land uses other than those related to livestock grazing activities also contribute to rangeland health conditions, but these will not be analyzed in this document.
6. Much of the implementation will occur when monitoring or verified observation indicates management changes are needed. Changes will be made within physical and financial constraints and on a priority basis as determined by BLM managers.
7. Much of the implementation will be determined and applied through collaborative management approaches, such as through Coordinated Resource Management planning or integrated planning efforts with other land owners, organizations, and agencies on a regional or watershed scale.
8. At a minimum all implementation will be coordinated and in consultation with the affected grazing permittees/lessees, the appropriate State agencies or Tribes having lands or resources within the area, and the interested public as known for any given allotment or rangeland area.
9. Due to the natural features (climate, topography, soils, presence of naturalized, non-native plants, etc.) some locations may take a very long time to meet standards.
10. The values and demand for use of the public rangelands will continue to increase and be diverse.
11. There will be no arbitrary removal of livestock. If removing livestock will not fix a problem (even if improper grazing practices originally caused the problem), then livestock will not be removed.

1.8 ISSUES NOT ADDRESSED IN THE ANALYSIS

The following issues will not be directly addressed within the EIS. They are primarily drawn from the list of issues identified in Section 1.6.

1. The viability of native plant and animal communities must be addressed in the standards and guidelines. However, the whole-sale reintroduction of native species in the annual grasslands will not be discussed in this document. Desired plant communities or other management goals are management decisions more properly made in a Resource Management Plan through the normal public planning process.
2. The identification of the specific actions needed, the scheduling, and the prioritization for implementation in meeting the standards and guidelines for rangeland health will occur as site-specific assessments and information indicate the need for on-the-ground change and will not be analyzed in this document. However Section 2.4 in Chapter 2

addresses how BLM will approach implementation; and Appendix 21 provides an initial implementation schedule.

3. BLM will continue to follow existing laws such as the Clean Water Act, Free-Roaming Wild Horse and Burro Act, various cultural resource protection acts, etc. These will not be discussed in this EIS.
4. Rest rotation, deferred grazing, and other management systems have been extensively analyzed in other environmental documents. The guidelines direct the manager to use grazing systems that will lead to meeting the standards. Local grazing practices will be decided case-by-case, and may be modified as needed to meet the standards.
5. Conditions and site potential vary tremendously across California and NW Nevada, depending upon climate, topography, and soil type. The guidelines are quite generic, with the intent that management actions be developed for a specific location based upon the conditions at that site.

1.9 ANALYSIS AREA

The analysis area includes those portions of California represented by the Bakersfield, Ukiah, and Susanville Resource Advisory Councils (RACs). See Map Number 3 for the location of the analysis area. This area encompasses 5.7 million acres of public rangelands of which approximately 4.2 million acres are in California and 1.5 million acres in Nevada. Currently there are 649 grazing allotments within the area consisting of 4,350,000 acres of public rangeland producing 338,715 animal unit months (AUMs) of livestock forage. This area is administered by ten BLM Field Offices. The number of grazing allotments, acres of public land available for grazing and animal unit months (AUMs) of authorized grazing use (preference) by office are shown in Table 1.9.

Table 1.9: Analysis Area			
Field Offices	# Allotments	# Acres (000)	# AUMs
Redding	38	32	3,658
Clear Lake	15	20	1,580
Arcata	11	35	4,122
Eagle Lake	57	990	52,039
Surprise	52	1,454	97,515
Alturas	157	501	56,330
Bishop	60	614	36,931
Folsom	65	69	7,341
Caliente	113	469	56,225
Hollister	81	166	22,974
TOTAL	649	4,350	338,715

1.10 CALIFORNIA DESERT CONSERVATION AREA

Early on in the process, the Desert Advisory Council (DAC) for the California Desert District (CDD), chose not to initiate a new planning process solely for livestock grazing standards and guidelines, but rather to develop standards and guidelines for all public land uses through the ongoing coordinated management planning efforts for the District. Their rationale was that the existing land use plans for the CDD largely conform to the fundamentals for rangeland health or the intentions as identified in the rulemaking, and that it would be better and more efficient to address the development of specific standards and guidelines within the individual Coordinated Management Plans. Accordingly, the development of standards and guidelines for the CDD will be postponed until the development of coordinated management plans in the CDCA or when other needs may drive plan amendments for the South Coast Resource Management Plan and planning for Eastern San Diego County. These planning efforts will include the Western Mojave Coordinated Management Plan, Northern and Eastern Colorado Desert Coordinated Management Plan, Northern and Eastern Mojave Planning Effort (3 separate plans), Coachella Valley Habitat Conservation Plan, Plan Amendment for the South Coast Resource Management Plan, and the Eastern San Diego Area Plan.

Therefore the CDD area of California will not be included in the analysis area for this EIS. During the interim, as provided by the regulations, the CDD will follow the fallback standards and guidelines or existing planning guidance, whichever is more protecting of the fundamentals for rangeland health.

Based upon this current process, the State Director will submit a set(s) of standards and guidelines for approval by the Secretary of the Interior for those portions of California and NW Nevada, excluding the CDD administrative area.

1.11 OTHER PLANS AND NEPA ANALYSIS

In 1994, the BLM completed a national Environmental Impact Statement entitled "Rangeland Reform 94." This document serves as the basic NEPA analysis for the rulemaking of February 22, 1995, that included the direction and identification of criteria for the development of rangeland standards and guidelines on a state or regional level. This EIS effort will tier to the national "Rangeland Reform 94" EIS where appropriate.

On April 13, 1994, a Record of Decision was developed by the BLM and USDA Forest Service which amended planning documents within the range of the Northern Spotted Owl, a threatened species. That document also included standards and guidelines for managing activities on public lands within the range of the habitat area. Some of the specific standards and guidelines relate to grazing management activities in specific types of habitats and are recognized as the current standards and guidelines to be followed in those instances. Those standards and guidelines and subsequent plan amendments will remain as policy and will not be reconsidered or analyzed in this EIS effort. Those standards and guidelines are primarily applicable to some of the grazing allotments managed by the Arcata Field Office as well as a few allotments managed by the Redding and Clear Lake Field Offices. This EIS will tier where appropriate to the final supplemental EIS prepared in February of 1994 on management of habitat for late-successional and old-growth forest related species within the range of the Northern Spotted Owl.

During March of 1994, the BLM and the USDA Forest Service prepared an environmental assessment (EA), commonly known as the "PACFISH" EA, for the implementation of interim strategies for managing anadromous fish-producing watersheds in the Columbia River Basin (outside of the range of the Northern Spotted Owl) and portions of California. The PACFISH EA included management strategies for livestock grazing for defined riparian habitat conservation areas within anadromous watersheds. Currently only the Redding Field Office has authorized livestock grazing on public lands within these areas. The decision record developed in February 1995 by the two agencies directed that the management strategies proposed in the EA be implemented for an 18 month period while long-term management strategies are developed through geographic specific environmental analyses. Subsequently both agencies have directed that the standards and guidelines proposed in PACFISH continue to be implemented and formally adopted for implementation. The BLM recognizes the PACFISH standards and guidelines as the applicable standards and guidelines where intended by that record of decision. This EIS, then, will tier from the PACFISH EA where applicable.

The BLM developed EISs for grazing management of available public rangelands in California and Northwestern Nevada, starting in 1979 and finishing in 1985. Much of the information and assessments contained in those documents remain valid and this EIS will tier to these documents where appropriate. Appendix 2 contains a table listing the titles, locations of areas covered, and dates of the grazing EISs.

The BLM developed numerous land use plans including both Management Framework Plans (MFPs) and Resource Management Plans (RMPs) covering resource management of public lands in California and Northwestern Nevada, from 1978 to 1997. Most parts of those plans remain valid, except that they will be amended to include the standards and guidelines developed through this process and any decisions within those plans that does not conform to

the standards and guidelines will be deleted or amended to conform. Appendix 4 contains a table listing the titles, locations and dates of those plans. Allotment management plans and other activity plans will also be amended as necessary to comply with these standards and guidelines.

1.12 LEGAL FRAMEWORK

The Bureau of Land Management operates under a number of federal and state laws and regulations. Appendix 3 contains a listing of some of the major laws that affect BLM's management of public lands.